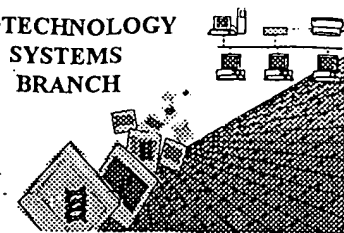


J. Guen

Re Reim

BIOTECHNOLOGY
SYSTEMS
BRANCH



#30

RAW SEQUENCE LISTING **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/134,333B
Source: 1600
Date Processed by STIC: 4/25/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**
VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



1600

RAW SEQUENCE LISTING

DATE: 04/25/2003

PATENT APPLICATION: US/09/134,333B

TIME: 14:33:04

Input Set : A:\066001350XCIP-a.ST25.txt

Output Set: N:\CRF4\04252003\I134333B.raw

3 <110> APPLICANT: LONGACRE-ANDRE, SHIRLEY
 4 ROTH, CHARLES
 5 NATO, FARIDABNO
 6 BARNWELL, JOHN
 7 MENDIS, KAMINI
 9 <120> TITLE OF INVENTION: RECOMBINANT PROTEIN CONTAINING A C-TERMINAL FRAGMENT OF
 PLASMODIUM MSP-1

11 <130> FILE REFERENCE: 0660-0135-0XCIP
 13 <140> CURRENT APPLICATION NUMBER: 09/134,333B
 14 <141> CURRENT FILING DATE: 1998-08-14
 16 <150> PRIOR APPLICATION NUMBER: PCT/FR97/00290
 17 <151> PRIOR FILING DATE: 1997-02-14
 19 <150> PRIOR APPLICATION NUMBER: FR96/01822
 20 <151> PRIOR FILING DATE: 1996-02-14
 22 <160> NUMBER OF SEQ ID NOS: 15
 24 <170> SOFTWARE: PatentIn version 3.1
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 291
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Artificial Sequence
 31 <220> FEATURE:
 32 <223> OTHER INFORMATION: synthetic DNA
 34 <220> FEATURE:
 35 <221> NAME/KEY: CDS
 36 <222> LOCATION: (1)..(291)
 37 <223> OTHER INFORMATION:

Does Not Comply
Corrected Diskette Needed

P.2

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 41 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
 42 1 5 10 15
 44 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt 96
 45 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
 46 20 25 30
 48 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac 144
 49 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
 50 35 40 45
 52 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc 192
 53 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
 54 50 55 60
 56 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt 240
 57 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
 58 65 70 75 80
 60 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa 288
 61 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser

RAW SEQUENCE LISTING

DATE: 04/25/2003

PATENT APPLICATION: US/09/134,333B

TIME: 14:33:04

Input Set : A:\066001350XCIP-a.ST25.txt

Output Set: N:\CRF4\04252003\I134333B.raw

62 85 90 95 291

64 taa

67 <210> SEQ ID NO: 2

68 <211> LENGTH: 95

69 <212> TYPE: PRT

C--> 70 <213> ORGANISM: Artificial Peptide *invalid response - see Item 10 on Error Summary Sheet*

72 <220> FEATURE:

73 <223> OTHER INFORMATION: synthetic DNA *? This sequence is not a DNA sequence.*

75 <400> SEQUENCE: 2

77 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu

78 1 5 10 15

81 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys

82 20 25 30

85 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn

86 35 40 45

89 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys

90 50 55 60

93 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys

94 65 70 75 80

97 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser

98 85 90 95

101 <210> SEQ ID NO: 3

102 <211> LENGTH: 279

103 <212> TYPE: DNA

104 <213> ORGANISM: Plasmodium falciparum

106 <400> SEQUENCE: 3

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109 catttagatg aaagagaaga atgtaaatgt ttattaaatt acaaacaaga aggtgataaa 120

111 tgtgttgaaa atccaaatcc tacttgtaac gaaaataatg gtggatgtga tgcagatgcc 180

113 aaatgtaccg aagaagattc aggtagcaac ggaaagaaaa tcacatgtga atgtactaaa 240

115 cctgattctt atccactttt cgatggtatt tctcgcagt 279

118 <210> SEQ ID NO: 4

119 <211> LENGTH: 354

120 <212> TYPE: DNA

121 <213> ORGANISM: Artificial Sequence

123 <220> FEATURE:

124 <223> OTHER INFORMATION: synthetic DNA

126 <220> FEATURE:

127 <221> NAME/KEY: CDS

128 <222> LOCATION: (1)..(354)

129 <223> OTHER INFORMATION:

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133 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu

134 1 5 10 15

136 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt 96

137 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys

138 20 25 30

140 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac 144

RAW SEQUENCE LISTING

DATE: 04/25/2003

PATENT APPLICATION: US/09/134,333B

TIME: 14:33:04

Input Set : A:\066001350XCIP-a.ST25.txt

Output Set: N:\CRF4\04252003\I134333B.raw

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141 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
142          35          40          45
144 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc      192
145 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
146      50          55          60
148 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt      240
149 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
150 65          70          75          80
152 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc tcc      288
153 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
154          85          90          95
156 tct aac ttc ttg ggc atc tcg ttc ttg ttg atc ctc atg ttg atc ttg      336
157 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
158          100          105          110
160 tac agc ttc att taa taa      354
161 Tyr Ser Phe Ile
162          115
165 <210> SEQ ID NO: 5
166 <211> LENGTH: 116
167 <212> TYPE: PRT
168 <213> ORGANISM: Artificial Sequence
170 <220> FEATURE:
171 <223> OTHER INFORMATION: synthetic peptide
173 <400> SEQUENCE: 5
175 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
176 1          5          10          15
179 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
180          20          25          30
183 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
184          35          40          45
187 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
188          50          55          60
191 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
192 65          70          75          80
195 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
196          85          90          95
199 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
200          100          105          110
203 Tyr Ser Phe Ile
204          115
207 <210> SEQ ID NO: 6
208 <211> LENGTH: 342
209 <212> TYPE: DNA
210 <213> ORGANISM: Plasmodium falciparum
212 <400> SEQUENCE: 6
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215 catttagatg aaagagaaga atgtaaatgt ttatttaaatt acaaacaaga aggtgataaa      120
217 tgtgttgaaa atccaaatcc tacttgtaac gaaaataatg gtggatgtga tgcagatgcc      180
219 aaatgtaccg aagaagattc aggtagcaac ggaaagaaaa tcacatgtga atgtactaaa      240

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RAW SEQUENCE LISTING

DATE: 04/25/2003

PATENT APPLICATION: US/09/134,333B

TIME: 14:33:04

Input Set : A:\066001350XCIP-a.ST25.txt

Output Set: N:\CRF4\04252003\I134333B.raw

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221 cctgattctt atccactttt cgatggtatt ttctgcagtt cctctaactt cttaggaata 300
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227 <211> LENGTH: 387
228 <212> TYPE: DNA
229 <213> ORGANISM: Plasmodium falciparum
231 <220> FEATURE:
232 <221> NAME/KEY: CDS
233 <222> LOCATION: (1)..(387)
234 <223> OTHER INFORMATION:
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239 1 5 10 15
241 tgt caa tgt gaa aca gaa agt tat aag cag ctt gta gcc aac gtg gac 96
242 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
243 20 25 30
245 gaa ttc aac atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag 144
246 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
247 35 40 45
249 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt 192
250 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
251 50 55 60
253 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac 240
254 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
255 65 70 75 80
257 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc 288
258 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
259 85 90 95
261 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt 336
262 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
263 100 105 110
265 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa 384
266 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
267 115 120 125
269 taa 387
272 <210> SEQ ID NO: 8
273 <211> LENGTH: 127
274 <212> TYPE: PRT
275 <213> ORGANISM: Plasmodium falciparum
277 <400> SEQUENCE: 8
279 Met Lys Ala Leu Leu Phe Leu Phe Ser Phe Ile Phe Phe Val Thr Lys
280 1 5 10 15
283 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
284 20 25 30
287 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
288 35 40 45
291 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
292 50 55 60

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RAW SEQUENCE LISTING

DATE: 04/25/2003

PATENT APPLICATION: US/09/134,333B

TIME: 14:33:04

Input Set : A:\066001350XCIP-a.ST25.txt

Output Set: N:\CRF4\04252003\I134333B.raw

295 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
 296 65 70 75 80
 299 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
 300 85 90 95
 303 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
 304 100 105 110
 307 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
 308 115 120 125

311 <210> SEQ ID NO: 9

312 <211> LENGTH: 330

313 <212> TYPE: DNA

314 <213> ORGANISM: Plasmodium falciparum

316 <220> FEATURE:

317 <221> NAME/KEY: CDS

318 <222> LOCATION: (1)..(330)

319 <223> OTHER INFORMATION:

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 323 Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp Glu Phe Asn
 324 1 5 10 15
 326 atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag aac tct ggc 96
 327 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
 328 20 25 30
 330 tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt ctg ctg aac 144
 331 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
 332 35 40 45
 334 tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac ccg acc tgt 192
 335 Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn Pro Thr Cys
 336 50 55 60
 338 aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc acc gag gag 240
 339 Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys Thr Glu Glu
 340 65 70 75 80
 342 gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt acc aaa ccc 288
 343 Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys Thr Lys Pro
 344 85 90 95
 346 gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa taa 330
 347 Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
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351 <210> SEQ ID NO: 10

352 <211> LENGTH: 108

353 <212> TYPE: PRT

354 <213> ORGANISM: Plasmodium falciparum

356 <400> SEQUENCE: 10

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 359 1 5 10 15
 362 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
 363 20 25 30
 366 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
 367 35 40 45

VERIFICATION SUMMARY

DATE: 04/25/2003

PATENT APPLICATION: US/09/134,333B

TIME: 14:33:05

Input Set : A:\066001350XCIP-a.ST25.txt

Output Set: N:\CRF4\04252003\I134333B.raw

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L:70 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:131 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:129
L:236 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:234
L:321 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:319